Arizona Department of Health Services

Office of Laboratory Licensure, Certification & Training

3443 N Central Avenue, Suite 810
Phoenix, Arizona 85012
(602) 255-3454
(602) 255-1070 FAX
Technical Support Hot-Line 1-800-592-0374

Jane Dee Hull, Governor
James R. Allen, MD, MPH, Director

DATE: July 10, 1998

TO: Laboratory Director and QA Manager

FROM: Dr. Barbara J. Erickson, Ph.D., Bureau Chief

SUBJECT: Information Update #48

NOTE: If any problems occur with this web site, please call 1-800-952-0074 or (602) 255-3454 and ask for Technical Resources and Training. Thank You.

1. The Office of the Laboratory Licensure requires a laboratory to include a standard at the reporting level for multi-level calibrations. When the method specifically allows a calibration, such as in 200.7, with a blank and one standard, the laboratory should run the Reporting Level standard as a check. If the method does not specify that the reporting limit check is needed, then the laboratory must establish control limits for determining the acceptance criteria of this check. The "Manual for the Certification of Laboratories Analyzing Drinking Water", March 1997, IV-7, Section 7.2.12, and SW-846, 8000B, Rev. 2, 12/96, Section 7.4.1.2, states the reporting limit calibration standard requirement.

2. According to information we received from Cincinnati, it is acceptable to use the "Hot Block" digestion system for metal sample digestion for methods 200.7, 200.9, 6010A, 7000 series, 3113B and for mercury sample digestion using EPA methods 245.1 and 7470A. It is permissible to use the Block Digestor with reduced volume for the digestion of metals, as long as the chemistry has not changed and the lab can meet the method IDC. Sample size reduction is allowed as long as the labs have enough sample digestate to complete all the required quality control.

3. There appears to be some concern in the Arizona environmental lab community as to the holding time of trip blanks. Some opinions are that the holding time for trip blanks should begin when the trip blanks are prepared in the lab rather than when field samples are taken. According to Ed Glick of EPA, Cincinnati, a trip blank has the same "life" as a sample with which they are sent. Trip blanks are of the same age as the sample set and are used to determine if the sample MAY have been contaminated in transit.

4. The easiest way to check the microbiology sample temperature upon receipt to the laboratory is to have a temperature control sample that is collected at the same time and place as the true sample and is shipped under similar conditions. Upon reaching the laboratory, this temperature control sample can be measured and the result extrapolated to the true sample. This protocol would also work for volatiles.

5. PRESENCE-ABSENCE (P-A) COLIFORM TEST FOR DRINKING WATER:

   According to the "Manual for the Certification of Laboratories Analyzing Drinking Water", fourth edition, section 5.4.5, all samples which produce a non-yellow turbid culture in P-A medium must be invalidated. The laboratory must collect, or request that the system collect, another sample from the same location as the original invalidated sample. Before invalidation, the laboratory may perform a confirmed test on the total coliform negative culture and/or a fecal coliform/E.Coli test. If the confirmed test is total coliform-positive, the sample must be reported as such. If the confirmed test is negative, the sample must be invalidated.

6. Clarification for the participation in the 8015AZ PE Study for licensure: Multiple licensed labs under the same ownership may choose either of the following 2 options:

   a. Each lab can purchase a separate PE sample(s), analyze and report the results individually.

   b. One PE sample can be purchased and split among the multiple labs. Results from one lab can be reported. Each lab must analyze the PE sample individually and retain all the documentation for review during a future onsite audit. If any of the multiple labs do not pass the PE sample, licensure for that lab will not be issued until the PE study is satisfactorily completed.

7. Arizona Environmental Laboratory Licensure Rules require that a licensed lab maintain complete and current Standard Operating Procedures (SOPs) for all licensed methods. The SOPs should ensure that various people at various times perform methods in the same way. The SOPs should be user friendly, easy to follow and at a minimum consist of the following information:

   - meet all the requirements of the reference method
   - reflect all the procedures followed in the laboratory
   - list of the actual concentrations of calibration standards, check standards and spikes
   - instrumental conditions and set up
   - calculations for the quantitation of the final concentration of samples with the actual sample dilution factors which reflect the routine followed
   - requirements in R9-14-613 of the Arizona Environmental Laboratory Licensure Rules (if not included in the Quality Assurance Plan) should be included in the individual SOPs
   - preventative maintenance

8. If you have any questions regarding the Updates, or if you have any technical questions that need clarification, please call or send e-mail to Prabha Acharya, Program Manager, Technical Resources and Training at the Laboratory Licensure. A table of contents to all the Information Updates published is also available.